

IN THE CLAIMS:

Please amend claims 1, 2, 4-8, and 10-24 as follows.

1. (Currently Amended) A method, ~~of optimizing the compression efficiency in a packet data communication where a compression history of previous packets is used for the compression of a current packet, the method comprising:~~

updating ~~the~~ a compression history selectively, wherein selection is performed based on a first algorithm for determining whether a packet shall be compressed, and on a second algorithm for determining whether a compressed packet shall be used for an update of the compression history.

2. (Currently Amended) The method according to claim 1, further comprising:

ensuring a history consistency between a compressor and a decompressor is by using ~~Transmission Control Protocol~~ transmission control protocol, wherein the compressor monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~ transmission control protocol ~~receiving means~~ receiver.

3. (Original) The method according to claim 1, further comprising:

ensuring a history consistency between a compressor and a decompressor by using a feedback between the compressor and the decompressor.

4. (Currently Amended) The method according to claim 2, further comprising:

enabling the compressor to safely infer a subset of a first context at the decompressor by monitoring the ~~Transmission Control Protocol~~transmission control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

5. (Currently Amended) The method according to claim 1, further comprising:

ensuring a history consistency between a compressor and a decompressor by combining use of ~~Transmission Control Protocol~~transmission control protocol, wherein the compressor monitors an acknowledgment signaling of a ~~Transmission Control Protocol~~transmission control protocol ~~receiving means~~receiver, with use of a feedback between the compressor and the decompressor.

6. (Currently Amended) A method, ~~of optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the method comprising:~~

using a first algorithm in conjunction with a compressing device to decide if ~~the a~~ current packet should be compressed;

using a second algorithm in conjunction with the compressing device to decide which packets out of packets sent compressed are to be used to update a buffer of the compressing device;

signaling from the compressing device to a decompressing device such that the decompressing device knows which of the packets out of the packets sent are to be included in the a compression history; and

~~using the decompressing device and a packet sequence number assigned by a compressor to update a buffer thereof in synchronization with the compressing device.~~

7. (Currently Amended) The method according to claim 6, further comprising:

ensuring a history consistency between the compressing device and the a decompressing device by using ~~Transmission Control Protocol~~transmission control protocol, wherein the compressing device monitors an acknowledgment signaling of a ~~Transmission Control Protocol receiving mean~~transmission control protocol receiver.

8. (Currently Amended) The method according to claim 7, further comprising:

enabling the compressing device to safely infer a subset of a first context at the decompressing device by monitoring the ~~Transmission Control Protocol~~transmission

control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

9. (Original) The method according to claim 6, further comprising:

ensuring a history consistency between the compressing device and the decompressing device by using a feedback between the compressing device and the decompressing device.

10. (Currently Amended) The method according to claim 6, further comprising:

ensuring a history consistency between the compressing device and the ~~a~~ decompressing device by combining use of ~~Transmission Control Protocol~~ transmission control protocol, wherein the compressing device monitors an acknowledgment signaling of a ~~Transmission Control Protocol receiving mean~~ transmission control protocol receiver, with use of a feedback between the compressing device and the decompressing device.

11. (Currently Amended) ~~A compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~updating means for updating~~ a processor configured to update the a compression history selectively, the ~~updating means~~ processor having implemented and ~~processing~~ being configured to process a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history; and

~~storing means, operably connected to the updating means, for storing the~~
~~compression history.~~

12. (Currently Amended) The ~~device~~ apparatus according to claim 11, further comprising:

~~monitoring means for monitoring~~ a monitor configured to monitor an acknowledgment signaling of a ~~Transmission Control Protocol receiving~~ meanstransmission control protocol receiver, wherein the ~~monitoring means~~ monitor is operably connected to the ~~updating means~~ processor.

13. (Currently Amended) The ~~device~~ apparatus according to claim 12, wherein said ~~monitoring means~~ monitor is adapted ~~configured~~ to be enabled to safely infer a subset of a first context at a decompressor by monitoring ~~Transmission Control Protocol~~ transmission control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

14. (Currently Amended) The ~~device~~apparatus according to claim 11, further comprising:

~~establishing means for establishing~~an establisher configured to establish a feedback between the compression device and a decompression device, wherein the ~~establishing means~~establisher is operably connected to the ~~updating means~~processor.

15. (Currently Amended) ~~A compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~ An apparatus, comprising:

~~signaling means for signaling~~a transmitter configured to signal to a decompression device which of a first set of packets are to be included in ~~the~~a compression history, the ~~signaling means~~transmitter having implemented and processing a first algorithm used to decide if the current packet should be compressed; and

~~buffer means, operably connected to the signaling means, for storing the compression history; and~~

~~processing means for having~~a processor configured to have implemented and processing a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update ~~the~~a ~~buffer means~~, wherein the ~~processing means~~processor is operably connected to the ~~signaling means~~transmitter.

16. (Currently Amended) The ~~device~~apparatus according to claim 15, further comprising:

~~means for monitoring~~a monitor configured to monitor an acknowledgment signaling of a ~~Transmission Control Protocol receiving mean~~transmission control protocol receiver, wherein the ~~monitoring means~~monitor is operably connected to the ~~signaling mean~~transmitter.

17. (Currently Amended) The ~~device~~apparatus according to claim 16, wherein the ~~monitoring means~~monitor is ~~adapted~~configured to be enabled to safely infer a subset of a first context at a decompressor by monitoring a ~~Transmission Control Protocol~~transmission control protocol acknowledgment signaling, wherein the subset is used as a second context for compression.

18. (Currently Amended) The ~~device~~apparatus according to claim 15, further comprising:

~~establishing means for establishing~~a establishing unit configured to establish a feedback between the compression device and a decompression device, wherein the ~~establishing mean~~establishing unit is operably connected to the ~~signaling mean~~transmitter.

19. (Currently Amended) ~~A decompression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~An apparatus, comprising:

~~receiving means for receiving~~a receiver configured to receive signals from a compression device indicating which packets are to be included in ~~the~~a compression history; and

~~buffer means, operably connected to the receiving means, for storing the compression history; and~~

~~processing means for processing~~a processor configured to process a packet sequence number for updating ~~the~~a ~~buffer means~~ in synchronization with the compression device, wherein the ~~processing means~~processor is operably connected to the ~~receiving means~~receiver.

20. (Currently Amended) The ~~device~~apparatus according to claim 19, further comprising:

~~forwarding means for forwarding~~a forwarding unit configured to forward an acknowledgment signaling of a ~~Transmission Control Protocol~~transmission control protocol ~~receiving means~~receiver to the compression device, wherein the forwarding ~~means~~unit is operably connected to the ~~receiving means~~receiver.

21. (Currently Amended) The ~~device~~apparatus according to claim 19, further comprising:

~~establishing means for~~an establishing unit configured to establish a feedback between the compression device and the decompression device, wherein the establishing means is operably connected to the ~~receiving means~~receiver.

22. (Currently Amended) ~~A compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~An apparatus, comprising:

~~a processor configured to allow~~updating means for updating ~~the~~a compression history selectively, the ~~processor~~updating means ~~having implemented~~for implementing and processing a first algorithm related to whether a packet shall be compressed, and a second algorithm related to whether a compressed packet shall be used for an update of the compression history;; and

~~a memory unit, operably connected to the processor, for storing the compression history.~~

23. (Currently Amended) ~~A compression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~An apparatus, comprising:

~~a signaling unit configured to signal~~signaling means for signaling a decompression device which of a first set of packets are to be included in the compression history, the ~~signaling unit~~means having implemented and processing a first algorithm used to decide if the current packet should be compressed; and

~~a buffer, operably connected to the signaling unit, configured to store the compression history; and~~

~~a processor configured to~~processing means for havehaving implemented implementing and ~~to process~~processing a second algorithm, wherein the second algorithm is used to determine which of a second set of packets out of a third set of packets sent compressed are to be used to update the buffer, wherein processor is operably connected to the means for signaling.

24. (Currently Amended) ~~A decompression device for optimizing compression efficiency in a packet data communication where a compression history of previous packets is used for compression of a current packet, the device~~An apparatus, comprising:

~~a receiver configured to receive~~receiving means for receiving signals from a compression device indicating which packets are to be included in the ~~a~~a compression history; and

~~a buffer, operably connected to the receiver, configured to store the compression history; and~~

~~a processor configured to process~~processing means for processing a packet sequence number for updating the buffer in synchronization with the compression device, wherein the processor is operably connected to the ~~receiver~~receiving means.